

Abstract of the Invention

In order to realize a means for acquiring three-dimensional shape information about patterns by nondestruction and evaluate a relationship between the three-dimensional shape information about these patterns and device properties, a semiconductor device pattern evaluating system is provided with a feature index calculating means for quantifying a property of a three-dimensional shape of a pattern to be evaluated, as feature index, a database that records therein a relationship between the feature index of each three-dimensional pattern shape and a device property of a circuit containing patterns each having the feature index, and a device property estimating means for estimating a property of a device circuit formed by the pattern to be evaluated, on the basis of the feature index of the three-dimensional pattern shape, which have been quantified by the feature index calculating means, and the information recorded in the database.